

### **REMARKS/ARGUMENTS**

This paper is in response to the non-final Office Action of July 20, 2005. Applicants thank the Examiner for his careful review of this application. Applicants amend independent claims 1, 9, and 19 and dependent claims 4, 11, 12, 14, 21-24, and 28. Claims 2, 3, 13, 15-18, and 25-27 have been canceled. The amended claims introduce no new matter and are fully supported by the specification. Accordingly, Applicants respectfully request examination of pending claims 1, 4-12, 14, 19-24 and 28.

#### **Rejections under 35 U.S.C. §112**

The Examiner rejected claims 19-28 as being indefinite, under 35 U.S.C. 112, for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention. Claim 19 has been amended to cure the Examiner's rejection for indefiniteness. As claims 20-24, and 28 depend on amended claim 19, they can no longer be rejected for being indefinite under 35 U.S.C. 112.

#### **Anticipation Rejections under 35 U.S.C. § 102(b)**

The Examiner rejected claims 9-13 under 35 U.S.C. § 102(b) as being anticipated by Olson et al. Patent No. 5,705,433. Claim 13 has been canceled. This rejection is traversed, and Applicants request reconsideration in light of the amendments and remarks contained herein.

In contrast with the recited features in independent claim 9 as amended herein, Olson et al. does not disclose the etching of a dual doped gate structure. Specifically, Olson et al. is silent as to etching between two different types of doped polysilicon gates (i.e., n-doped polysilicon gate and p-doped polysilicon gate). For at least the

above reasons, Applicants respectfully submit that Olson et al. fails to anticipate Applicants' independent claim 9 and claims 10-12 which depend, directly or indirectly, from it. Applicants respectfully request this rejection be withdrawn for claims 9-12.

The Examiner further rejected claims 19-26 and 28 under 35 U.S.C. § 102(b) as being anticipated by Becker et al. Patent No. 5,094,712. This rejection is traversed, and Applicants request reconsideration.

In contrast with the recited features in independent claim 19 as amended herein, Becker et al. does not disclose that the oxygen used in the formation of the silicon oxide is from a source that is external to the plasma chamber. Specifically, Becker et al. discloses that "O<sub>2</sub> in the air" (See Becker et. al, column 9, lines 6-7) forms the silicon oxide layer in the chamber, not O<sub>2</sub> from a source that is external to the plasma chamber. For at least the above reasons, Applicants respectfully submit that Becker et al. fails to anticipate Applicants' independent claim 19 and dependent claims 20-24 and 28 which depend directly or indirectly therefrom. Applicants respectfully request this rejection be withdrawn.

**Obviousness Rejections under 35 U.S.C. § 103(a)**

The Examiner rejected claims 1-3 and 5-8 as being unpatentable over Chow et al. Patent No. 6,872,322 in view of Olson et al. In light of the amendments and arguments contained herein, Applicants respectfully request reconsideration of this rejection.

In contrast with Claim 1 as amended, Olson et al. teaches that the silicon containing gas is introduced into the plasma chamber at a flow rate of between 12 to 24 standard cubic centimeters per minute (sccm) and that suitable gases include silane

(SiH<sub>4</sub>), higher silanes (Si<sub>n</sub>H<sub>2n+2</sub>, IUPAC Compendium of Chemical Terminology 2<sup>nd</sup> edition), dichlorosilane (SiH<sub>2</sub>Cl<sub>2</sub>) and difluorosilane (SiH<sub>2</sub>F<sub>2</sub>). Therefore, Olson et al. fails to teach a flowrate of greater than 25 sccm and that suitable silicon containing gases include SiH<sub>3</sub>CH<sub>3</sub>, SiH(CH<sub>3</sub>)<sub>3</sub>, SiF<sub>4</sub>, SiHCl<sub>3</sub>, SiBr<sub>4</sub>, and Tetraethyl orthosilicate (TEOS). Chow et al. fails to cure the deficiencies of Olson et al. by failing to disclose any of the silicon containing gases and the flow rate range detailed in the Applicants' claimed invention. Claims 2, 3, and 5-8 depends from amended independent claim 1. Accordingly, Applicants respectfully request this rejection be withdrawn.

Claim 4 was rejected as being unpatentable over Chow et al. and Olson et al. as applied to claim 1, further in view of Becker et al. As discussed above Chow et al. in view of Olson et al. fails to teach each and every feature of claim 1. Becker et al. fails to cure the deficiencies of Chow et al. and Olson et al. Accordingly, Applicants respectfully request this rejection be withdrawn.

Claim 14 was rejected as being unpatentable over Olson et al. as applied to claim 9, in view of Becker et al. As discussed above Olson et al. fails to teach each and every feature of claim 9 and Becker et al. fails to cure the deficiencies of Olson et al. Accordingly, Applicants respectfully request this rejection be withdrawn.

Additionally, Applicants respectfully submit that the claimed subject matter cannot be rendered obvious by the combined teachings of the Chow et al. reference with other prior art. There is simply no suggestion or motivation for a person having ordinary skill in the art to combine the teachings from the Examiners' cited references with the Chow et al. reference to come up with the invention claimed by the Applicants. Chow et al. relates exclusively to a process for cleaning plasma chambers after etching not a process for etching silicon containing materials. Chow et al. solves entirely different problems than the Applicants' claimed invention. As such, it is

unreasonable to conclude that the Chow et al. reference even suggests the desirability of combining its teachings with other prior art to comprise the Applicants' claimed invention.

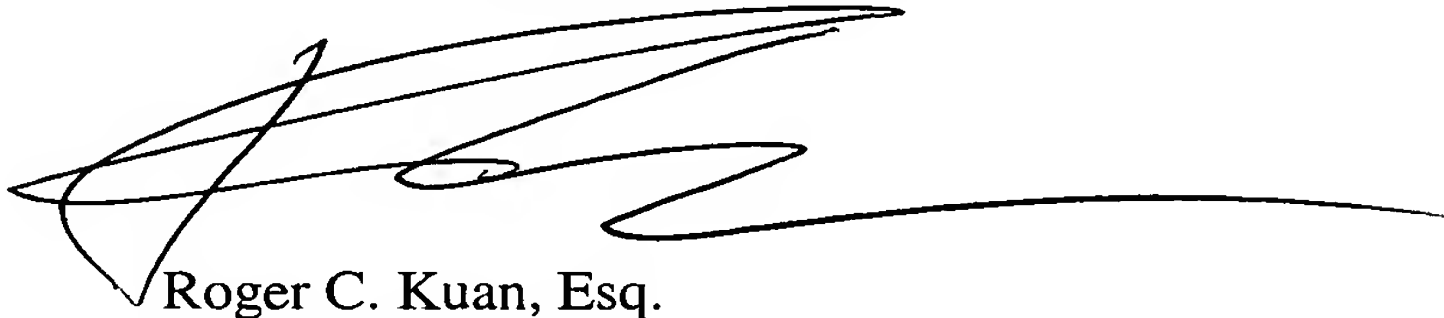
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**SUMMARY**

In view of the foregoing amendments and remarks, Applicants respectfully submits that the pending claims are in condition for allowance. Applicants respectfully requests reconsideration of the application and allowance of the pending claims. If the Examiner has any questions concerning the present Amendment, the Examiner is kindly requested to contact Roger C. Kuan at (408) 744-6927.

If any additional fees are due in connection with filing this Amendment, the Commissioner is also authorized to charge Deposit Account No. 50-0805 (Order No. LAM2P413). A duplicate copy of the transmittal is enclosed for this purpose.

Respectfully submitted,  
MARTINE PENILLA & GENCARELLA, LLP

A handwritten signature in black ink, appearing to be 'Roger C. Kuan', written over a horizontal line.

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